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Phenylethylamines, process for their preparation and compositions containing them.

(5) There are described compounds of formula I,

R₂, R₃, R₁₁, R₁₂ and R₃₁ have various meanings as defined herein for example R₃ and R₃ may represent hydrogen, halogen, alkyl C1 to 6 or nitro;

W represents a single bond, a disubstituted benzene or a 1.4-cyclohexanediyl group.

X represents NH, O, S, SO₂, CO, CH₂, CONH or -COO; Y, amongst other meanings defined herein, represents (CH₃)₄, CO, CS and SO₂.

in which R₁ represents OH, NR₁₁R₁₂, CH₂R₁₂ or fluorine,

Z represents a single bond, NR $_{10}$, CH $_{2}$, O, CO, S or SO $_{1}$, in which R $_{10}$ represents hydrogen or alkyl C1 to 6,

n and m each independently represent an integer from 1 to 4 inclusive, $% \left(1\right) =\left(1\right) ^{2}$

q represents an integer from 1 to 3 inclusive,

p represents 0 or an integer from 1 to 3 inclusive.

Rie represents hydrogen or chlorine,

 $\ensuremath{R_{\text{PM}}}$, amongst other meanings defined herein may represent hydrogen,

with four provises as defined herein, and pharmaceutically acceptable derivatives thereof.

There are also described the use of the compounds of formula I as pharmaceuticals, methods for making the compounds and pharmaceutical, e.g. cardiac, compositions containing the compounds.

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q preferably represents 1 or 2.
p preferably represents 0, 1 or 2.

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When Z represents a single bond, we prefer the sum of n+m to be from 5 to 7 inclusive, especially 6.

The compounds of formula I, and pharmaceutically acceptable derivatives thereof, are useful because they possess pharmacological activity in animals. Thus the compounds act on peripheral and/or central dopamine receptors. As such, they lower blood pressure, reduce heart rate and increase blood flow to certain vascular beds, e.g. renal beds. Some compounds also have an action on other adrenoreceptors, and these exhibit cardiac stimulant and bronchodilator effects. Activity of the compounds has been observed in the following assay systems:

- (a) canine renal blood flow, McNay and Goldberg,J. Pharmac, Exp. Ther., 151, 23-31, 1966.
 - (b) rabbit isolated ear artery, McCullogh, Rand and Story, Br. J. Pharmac, 49, 141-142, 1973, and
- (c) cat nictitating membrane, Gyorgy and Doda, Arch. Int.

 Pharmacodyn, 226, 194-206, 1977.

The compounds of the invention are indicated for use in the treatment of congestive heart failure, renal failure, angina pectoris, ischaemic heart disease, hypertension and reversible obstructive airways disease, hyperprolactinaemia and also in Parkinson's disease and

other neurological disorders. Compounds of the invention are also indicated for use in the treatment of glaucoma, gastric hypersecretion, e.g. in peptic ulcers, premature labour, acromegaly, and improvement of the blood supply to and healing of intestinal anastomoses and stomata.

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The dosage administered will naturally depend on the compound employed, the mode of administration and the desired effect. However, in general, satisfactory results are obtained when the compounds are administered at a dosage of from 0.05 µg to 50mg per kilogram of body weight per day. For man, the indicated total daily dosage is in the range 2.5 µg to 3.5g, which may be administered in divided doses of, for example 1 µg to 750mg.

The new compounds of the present invention may be used in combination with, or sequentially with, a wide variety of other pharmaceutically active substances.

Where appropriate the compounds may be mixed with one or more other active substances. The particular mixture or dose regimen used, and ratio of the active ingredients will depend on a variety of factors including the condition to be treated, the mode of administration, the particular active ingredients and the patient concerned.

Examples of compounds with which the present compounds may be mixed include:

beta-blockers, especially cardioselective beta

What we claim is:

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A compound of formula I,

in which R_1 represents OH, $NR_{11}R_{21}$, CH_2R_{12} or fluorine,

when R_1 represents OH, CH_2R_{12} or fluorine,

 R_2 and R_3 , which may be the same or different, each independently represent hydrogen, fluorine, chlorine, bromine, alkyl Cl to 6, hitro, nitrile, $(CH_2)_pR_9$ or SR_9 ,

when R_1 represents $NR_{11}R_{21}$, R_{11} represents hydrogen, CHO, COR_{13} , $COOR_{13}$, $CONH_2$, SO_2R_{13} , CH_2R_{14} or alkyl Cl to 6 and R_{21} represents hydrogen and R_2 and R_3 are as defined above, or

 R_{11} and R_2 together form the chain = CR_{23} -CH=CH-in which the carbon bearing R_{23} is adjacent to the nitrogen, R_{23} represents hydrogen or hydroxy, R_3 is as defined above and R_{21} has no meaning, or

 $\rm R_{11}$ and $\rm R_2$ together form the chain -COCH $_2-$ in which -CO- is adjacent to the nitrogen, $\rm R_3$ is as defined above and $\rm R_{21}$ represents hydrogen, or

 R_{11} and R_2 together represent 1,2-phenylene, R_3

is as defined above, and R_{21} represents hydrogen, $R_{12} \text{ represents hydrogen, OH, SO}_{2}R_{13} \text{ or alkyl Cl}$ to 6,

R₁₃ represents alkyl Cl to 6,

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R₁₄ represents phenyl or alkoxy Cl to 6 phenyl,
W represents a single bond, a 1,2; 1,3; or
1,4-disubstituted benzene ring; a -CH=CH-group or a
1,4-cyclohexanediyl group;

Y represents NH, O, S, SO₂, CO, CH₂, CONH or -COO;

Y represents (CH₂)q, CO, CS, SO₂ and R₂₀

represents hydrogen, or Y represents CR₁₅R₁₆CR₁₇R₁₈,

wherein the carbon atom bearing R₁₅ and R₁₆ is
adjacent to X and in which

 $m R_{17}$ and $m R_{18}$, together with the carbon atom to which they are attached form a carbonyl group, and $m R_{15}$, $m R_{16}$ and $m R_{20}$ each represent hydrogen, or

 $$^{\rm R}_{15}$$ and $$^{\rm R}_{20}$$ together form a chain -CH $_2^-$, and $$^{\rm R}_{16}$$, $$^{\rm R}_{17}$$ and $$^{\rm R}_{18}$$ each represent hydrogen, or

 R_{15} , R_{16} , R_{17} and R_{18} each independently represent hydrogen or alkyl C1 to 6 and R_{20} represents hydrogen;

z represents a single bond, $\ensuremath{\mathrm{NR}_{19}}$, $\ensuremath{\mathrm{CH}_2}$, O, CO, s or $\ensuremath{\mathrm{SO}_2}$,

in which R₁₉ represents hydrogen or alkyl Cl to 6;

n, and m each independently represent an integer from

1 to 4 inclusive;

q represents an integer from 1 to 3 inclusive;

p represents 0 or an integer from 1 to 3 inclusive;

 R_{q} represents phenyl or phenyl substituted by

5 hydroxy, and

 R_{10} represents hydrogen or chlorine, provided that

- i) when R_1 represents -OH, R_2 and R_3 both represent hydrogen,
- 10 X represents NH, Y represents $(CH_2)_q$, Z represents a single bond and R_{20} represents hydrogen, W does not represent a single bond;
 - ii) when R_1 represents -OH, R_2 and R_3 both represent hydrogen, W represents a single
- 15 bond,

X represents NH and Z represents a single bond, then at least one of $R_{15},\ R_{16},\ R_{17}$ and R_{18} is alkyl C1 to 6;

- iii) when X represents SO_2 , CO, COOO or CONH, Y does not represent CO, CS or SO_2 ;
 - iv) when Y represents CO, CS or SO₂, then Z does not represent CO or SO₂,

and pharmaceutically acceptable derivatives thereof.

A compound according to Claim 1 for use as a
 pharmaceutical.

3. A compound according to Claim 1 or 2, wherein R_1 represents OH or fluorine,

 R_2 and R_3 , which may be the same or different, each independently represent hydrogen, fluorine, chlorine, bromine, alkyl Cl to 6, nitrile, phenyl, $(CH_2)_p R_9$ or SR_q .

4. A compound according to Claim 1 or 2, wherein R_1 represents $NR_{11}R_{21}$ or CH_2R_{12} ,

either R_2 represents hydrogen, R_{11} represents hydrogen, CHO, COR_{13} , $COOR_{13}$, $CONH_2$, SO_2R_{13} , CH_2R_{14} or alkyl Cl to 6 and R_{21} represents hydrogen, or

 R_2 and R_{11} together form the chain =CR $_{23}$ -CH=CH-, in which the carbon bearing R_{23} is adjacent to the nitrogen, R_{23} represents hydrogen or hydroxy, and R_{21} has no meaning, or

 $\rm ^{R}_{2}$ and $\rm ^{R}_{11}$ together form the chain -COCH $_{2}-$ in which -CO- is adjacent to the nitrogen, and $\rm ^{R}_{21}$ represents hydrogen, or

 R_{2} and R_{11} together represent 1,2-phenylene, and R_{21} represents hydrogen,

 ${
m R}_{3}$ and ${
m R}_{20}$ each represent hydrogen, W and Z each represent a single bond,

X represents NH, and

Y represents (CH₂)_q.

5. A compound according to any one of Claim 1, 2 or 3, wherein

R₁ represents OH,

 R_2 and R_3 , which may be the same or different, each independently represent hydrogen, fluorine, chlorine, bromine, alkyl Cl to 6, nitrile, phenyl $(CH_2)_pR_9$ or SR_9 ,

W and Z each represent a single bond,

X represents NH,

10 Y represents $(CH_2)_q$, and

 R_{20} represents hydrogen.

6. 3-Chloro-4-[2-(6-(2-phenylethylamino)hexylamino)
ethyl]-1,2-benzenediol;

3-[2-Phenylethy1]-4-[2-[6-[2-phenylethylamino]

hexylamino]ethyl]-1,2-benzenediol;

3-Ethyl-4-[2-[6-[2-phenylethylamino]hexylamino]
-ethyl]-1,2-benzenediol;

3-Bromo-4-[2-[6-[2-phenylethylamino]hexylamino] ethyl]-1,2-benzenediol;

or a pharmaceutically acceptable salt thereof.

7. 2-Hydroxy-5[2-(6-(2-phenylethylamino)hexylamino)ethyl] benzene methanol;

N-[2-hydroxy-5-[2-[6-(2-phenylethylamino)hexylamino] ethyl]phenyl]methanesulphonamide;

or a pharmaceutically acceptable salt thereof.

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5-[2-(6-(2-Phenylethylamino)hexylamino)ethyl]-3-
     propyl-1,2-benzenediol;
          4-[2-(6-(2-Phenylethylamino)hexylamino)ethyl]3-
     propyl-1,2-benzenediol;
          3-Methyl-4-[2-(6-(2-phenylethylamino)hexylamino)
     ethyl]-1,2-benzenediol;
          3-Nitro-4-[2-(6-(2-phenylethylamino)hexylamino)
     ethyl]-1,2-benzenediol;
          3-Nitro-5-(2-(6-(2-phenylethylamino)hexylamino)
     ethyl]-1,2-benzenediol;
10
          3-Ethyl-4-[2-[6-[2-phenylethylamino]hexylamino]
     -ethyl]-1,2-benzenediol;
          3-Butyl-4-[2-[6-[2-phenylethylamino]hexylamino]-
     ethyl]-1,2-benzenediol;
          6-[2-[6-[2-Phenylethylamino]hexylamino]ethyl]
15
     -[1,1'-bipheny1]-2,3-diol;
          4-[2-[6-[2-Phenylethylamino]hexylamino]ethyl]-
     1,2,3-benzenetriol;
           4-[2-[6-[2-Phenylethylamino]hexylamino]ethyl]-
20
     -3-phenylmethyl-1,2-benzenediol;
           3-Butyl-4-[2-[6-[2-phenylethylamino]hexylamino]-
     ethyl]-1,2-benzenediol;
           5-Fluoro-4-[2-[6-[2-phenylethylamino]hexylamino]
     -ethyl]-1,2-benzenediol;
25
           5-Methyl-4-[2-[6-[2-phenylethylamino]hexylamino]
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ethyl]-1,2-benzenediol;
         3-Fluoro-5-[2-[6-[2-phenylethylamino]hexylamino]
    ethyl]-1,2-benzenediol;
         3-Methyl-5-[2-[6-2-phenylethylamino]hexylamino]
    ethyl]-1,2-benzenediol;
5
          6-Fluoro-4-[2-[6-[2-phenylethylamino]hexylamino]
     ethyl]-3-propyl-1,2-benzenediol;
          3-[1-Methylethyl]-4-[2-[6-[2-phenylethylamino]-
     hexylamino]ethyl]-1,2-benzenediol;
          4-[2-[6-[2-Phenylethylamino]hexylamino]ethyl]-3-
10
     phenylthio-1,2-benzenediol;
          6-[2-[6-[2-Phenylethylamino]hexylamino]ethyl]-
     [1,1'-biphenyl]-2,3,4'-triol;
           3-Chloro-5-[2-[6-[2-phenylethylamino]hexylamino]
      ethyl]-1,2-benzenediol;
15
           3-Bromo-5-[2-[6-[2-phenylethylamino]hexylamino]
      ethyl]-1,2-benzenediol;
           4-[2-[4-[(2-Phenylethyl)aminomethyl]phenylmethylamino]
      ethyl]1,2-benzenediol;
           4-[2-[4-[(2-Phenylethyl)aminomethyl]-trans
 20
      cyclohexylmethylamino]ethyl]-1,2-benzenediol;
           4-[2-[2-[2-[2-(2-Phenylethyl)aminoethyl]phenyl]-
      ethyl]aminoethyl]-1,2-benzenediol;
            4-[2-[3-[2-[2-(2-Phenylethylaminomethyl)phenyl]propyl
       amino]ethyl]-1,2-benzenediol;
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E-4-[2-[6-(2-Phenylethylamino)-hex-3-enylamino]ethyl]
     -1,2-benzenediol;
          4-[2-(9-Phenylnonylamino)ethyl]-1,2-benzenediol;
          4-[2-[6-(2-Phenylethylthio)hexylamino)ethyl]-1,2
5
     benzenediol;
          4-[2-[6-[2-Phenylethoxy]hexylamino]ethyl-1,2-
     benzenediol;
          N-6-[2-(3,4-Dihydroxyphenyl)ethylamino]hexyl-N'-
     phenylurea
10
          N-[6-[2-(3,4-Dihydroxyphenyl)] ethylamino]hexyl]benzene
     acetamide:
          4-[2-[6-(2,3-Dihydro-IH-inden-2-ylamino)hexylamino]
     ethyl]-1,2-benzenediol;
          4-[2-[6-(2-Methyl-2-phenylpropylamino)hexylamino]
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     ethyl]-1,2-benzenediol;
          4-[2-[6-(1,1-dimethyl-2-phenyl ethylamino)hexylamino]
     ethyl]-1,2-benzenediol;
          4-[2-(6-[2-(Phenylamino)ethylamino]nexylamino]ethyl]-
     1,2-benzenediol;
20
          4-[2-[6-(2-Phenyloxyethylamino)hexylamino]ethyl]-1,2-
     benzenediol:
          4-[2-[6-[2-(Phenylthio)ethylamino]hexylamino]ethyl-1,2-
     benzenediol;
          6-[2-(3,4-Dihydroxyphenyl)ethylamino]-N-
25
     (2-phenylethyl) hexanamide;
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2-Phenylethyl 6-[2-(3,4-dihydroxyphenyl)ethylamino]-hexanoate;

2-Methylsulphonylmethyl-5-[2-(6-(2-phenylethylamino) hexylamino) ethyl]phenol;

5 2-Amino-4-[2-[6-(2-phenylethylamino)hexylamino] ethyl]phenol;

2- (Methylamino) -4-[2-[6-(2-phenylethylamino) hexyl amino] ethyl] phenol;

4-[2-[6-(2-Phenylethylamino)hexylamino]ethyl]-2-

10 (phenylmethylamino)phenol;

N-[2-Hydroxy-5-[2-[6-(2-phenylethylamino)-hexylamino]ethyl]phenyl]acetamide;

2-Fluoro-4-[2-[6-(2-phenylethylamino)hexylamino]ethyl] phenol:

1, 2-Dihydro-8-hydroxy-5-[2-[6-(2-phenylethylamino)-hexylamino]ethyl]-2-oxo-2H-quinoline;

or a pharmaceutically acceptable salt thereof.

- 9. A pharmaceutical composition according to any one of the preceding Claims in admixture with a pharmaceutically acceptable adjuvant, diluent or carrier.
- 10. A process for the production of a compound of formula I according to Claim 1, or a pharmaceutically acceptable derivative thereof, which comprises removal of at least one protecting group from a compound of

25 formula II.

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$$R_{1}^{a}$$
 R_{2}^{a}
 R_{2

in which R_3 , R_{10} , R_{20} n, m, W and Y are as defined in Claim 1,

 ${\rm R_4a}$ and ${\rm R_5a}$, which may be the same or different, each represent hydrogen or a protecting group,

 R_1 a, R_2 a, Xa and Za have the same respective meanings as R_1 , R_2 , X and Z defined in Claim 1, save that in addition

 R_{1} a represents OR_{6} a, NR_{11} a R_{21} a or $CH_{2}OR_{7}$ a, in which R_{6} a, R_{7} a and one or both of R_{11} a and R_{21} a may represent a protecting group, R_{11} a and R_{21} a otherwise being defined as R_{11} and R_{21} in Claim 1, respectively;

 $_{\rm NR}$ may represent $_{\rm NR}{_{\rm 8}}{_{\rm a}}$, in which $_{\rm R}{_{\rm 8}}{_{\rm a}}$ represents a protecting group,

Za may represent $NR_{19}a$, in which $R_{19}a$ has the same meaning as R_{19} defined above, save that in addition, $R_{19}a$ may represent a protecting group,

provided that the compound of formula II bears at least one protecting group,

25 and where desired or necessary converting the

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resulting compound of formula I to a pharmaceutically acceptable derivative thereof, or vice versa.

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What we claim is:

A process for the production of a compound of formula
 I,

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$$R_2$$
 $(CH_2)_2NH(CH_2)_nW(CE_2)_m-X-Y-Z$ R_{10}

in which R_1 represents OH, $NR_{11}R_{21}$, CH_2R_{12} , or fluorine,

when R₁ represents OH, CH₂R₁₂ or fluorine,

 R_2 and R_3 , which may be the same or different, each independently represent hydrogen, fluorine, chlorine, bromine, alkyl Cl to 6, nitro, nitrile, $(CH_2)_pR_9$ or SR_9 ;

when R_1 represents $NR_{11}R_{21}$, R_{11} represents hydrogen, CHO, COR_{13} , $COOR_{13}$, $CONH_2$, SO_2R_{13} , CH_2R_{14} or alkyl Cl to 6 and R_{21} represents hydrogen and R_2 and R_3 are as defined above, or

 R_{11} and R_2 together form the chain = CR_{23} -CH=CHin which the carbon bearing R_{23} is adjacent to the nitrogen, R_{23} represents hydrogen or hydroxy, R_3 is as defined above and R_{21} has no meaning, or

 R_{11} and R_2 together form the chain -COCH₂- in which -CO- is adjacent to the nitrogen, R_3 is as defined above and R_{21} represents hydrogen, or

 $\rm R_{11}$ and $\rm R_2$ together represent 1,2-phenylene, $\rm R_3$ is as defined above, and $\rm R_{21}$ represents hydrogen,

 $\rm R^{}_{12}$ represents hydrogen, OE, $\rm SO_2R^{}_{13}$ or alkyl C1 to 6,

5 R₁₃ represents alkyl Cl to 6,

 R_{14} represents phenyl or alkoxy Cl to 6 phenyl,

W represents a single bond, a 1,2; 1,3; or 1,4-disubstituted benzene ring; a -CH=CH-group or a 1,4-cyclohexanediyl group;

X represents NH, O, S, SO₂, CO, CH₂, CONH or -COO;

Y represents (CH₂)q, CO, CS, SO₂ and R₂₀ represents hydrogen, or Y represents $CR_{15}R_{16}CR_{17}R_{18}$, wherein the carbon atom bearing R₁₅ and R₁₆ is adjacent to X and in which

 R_{17} and R_{18} , together with the carbon atom to which they are attached form a carbonyl group, and R_{15} , R_{16} and R_{20} each represent hydrogen, or

 $\rm R_{15}$ and $\rm R_{20}$ together form a chain -CH $_2-$, and $\rm R_{16}$, $\rm R_{17}$ and $\rm R_{18}$ each represent hydrogen, or

 R_{15} , R_{16} , R_{17} and R_{18} each independently represent hydrogen or alkyl C1 to 6 and R_{20} represents hydrogen;

Z represents a single bond, NR_{19} , CH_2 , O, CO, S or SO_2 ,

25 in which R_{19} represents hydrogen or alkyl Cl to 6;

n, and m each independently represent an integer from 1 to 4 inclusive;

q represents an integer from 1 to 3 inclusive;

p represents 0 or an integer from 1 to 3 inclusive;

 $\ensuremath{\mathtt{R}}_9$ represents phenyl or phenyl substituted by hydroxy, and

R₁₀ represents hydrogen or chlorine, provided that

i) when R_1 represents -OH, R_2 and R_3 both represent hydrogen,

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X represents NH, Y represents $(CH_2)_q$, Z represents a single bond and R_{20} represents hydrogen, W does not represent a single bond;

- ii) when R_1 represents -OH, R_2 and R_3 both represent hydrogen, W represents a single bond;
 - X represents NH and Z represents a single bond, then at least one of $R_{15},\ R_{16},\ R_{17}$ and R_{18} is alkyl Cl to 6;
- iii) when X represents SO₂, CO, COO or CONH, Y does not represent CO, CS or SO₂;
 - iv) when Y represents CO, CS or SO_2 , then Z does not represent CO or SO_2 ,

and pharmaceutically acceptable derivatives thereof,
which comprises removal of at least one protecting
group from a compound of formula II,

$$R_{1}^{a}$$
 R_{2}^{a}
 R_{2}^{a}

in which R₃, R₁₀, R₂₀ n, m, W and Y are as defined above,

 ${\rm R}_4{\rm a}$ and ${\rm R}_5{\rm a}$, which may be the same or different, each represent hydrogen or a protecting group,

 $R_{1}a$, $R_{2}a$, Xa and Za have the same respective meanings as R_{1} , R_{2} , X and Z defined above, save that in addition

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 R_{1} a represents OR_{6} a, NR_{11} a R_{21} a or $CH_{2}OR_{7}$ a, in which R_{6} a, R_{7} a and one or both of R_{11} a and R_{21} a may represent a protecting group, R_{11} a and R_{21} a otherwise being defined as R_{11} and R_{21} above, respectively;

 $_{\mbox{\scriptsize May}}$ represent NR $_{\mbox{\scriptsize B}}\mbox{a}$, in which R $_{\mbox{\scriptsize B}}\mbox{a}$ represents a protecting group,

Za may represent $NR_{19}a$, in which $R_{19}a$ has the same meaning as R_{19} defined above, save that in addition, $R_{19}a$ may represent a protecting group,

provided that the compound of formula II bears at least one protecting group,

and where desired or necessary converting the resulting compound of formula I to a pharmaceutically

- acceptable derivative thereof, or vice versa.
- 2. A process according to Claim 1, wherein R_1 represents OH or fluorine,
- R_2 and R_3 , which may be the same or different, each independently represent hydrogen, fluorine, chlorine, bromine, alkyl Cl to 6, nitrile, phenyl, $(CH_2)_pR_9$ or SR_9 .
- 3. A process according to Claim 1, wherein R₁ represents NR₁₁R₂₁ or CH₂R₁₂,
- either R_2 represents hydrogen, R_{11} represents hydrogen, CHO, COR_{13} , $COOR_{13}$, $CONH_2$, SO_2R_{13} , CH_2R_{14} or alkyl Cl to 6 and R_{21} represents hydrogen, or
- R_2 and R_{11} together form the chain =CR $_{23}$ -CH=CH-, in which the carbon bearing R_{23} is adjacent to the nitrogen, R_{23} represents hydrogen or hydroxy, and R_{21} has no meaning, or

 $^{
m R}_{
m 2}$ and $^{
m R}_{
m 11}$ together form the chain -COCH $_{
m 2}$ - in which -CO- is adjacent to the nitrogen, and $^{
m R}_{
m 21}$ represents hydrogen, or

 $\rm R_{2}$ and $\rm R_{11}$ together represent 1,2-phenylene, and $\rm R_{21}$ represents hydrogen,

 ${
m R}_{3}$ and ${
m R}_{20}$ each represent hydrogen, W and Z each represent a single bond,

X represents NH,

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Y represents (CH₂)_q.

4. A process according to Claim 1, wherein the compound of formula I is

3-Chloro-4-[2-(6-(2-phenylethylamino)hexylamino)

5 ethyl]-1,2-benzenediol;

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3-[2-Phenylethyl]-4-[2-[6-[2-phenylethylamino]
hexylamino]ethyl]-1,2-benzenediol;

3-[2-[4-Hydroxyphenyl]ethyl]-4-[2-[6-[2-phenyl ethylamino]hexylamino]ethyl]-1,2-benzenediol;

3-Bromo-4-[2-[6-[2-phenylethylamino]hexylamino] ethyl]-1,2-benzenediol;

or a pharmaceutically acceptable salt thereof.

- 6. A process according to Claim 1, wherein the compound of formula I is
- 2-Hydroxy-5[2-(6-(2-phenylethylamino)hexylamino)ethyl]
 benzene methanol;

N-[2-hydroxy-5-[2-[6-(2-phenylethylamino)hexylamino] ethyl]phenyl]methanesulphonamide;

or a pharmaceutically acceptable salt thereof.

20 7. A process according to Claim 1, wherein the compound of formula I is

5-[2-(6-(2-Phenylethylamino)hexylamino)ethyl]-3-propyl-1,2-benzenediol;

4-[2-(6-(2-Phenylethylamino)hexylamino)ethyl]3-

25 propyl-1,2-benzenediol;

```
3-Methyl-4-[2-(6-(2-phenylethylamino)hexylamino)
      ethyl]-1,2-benzenediol;
            3-Nitro-4-[2-(6-(2-phenylethylamino)hexylamino)
      ethyl]-1,2-benzenediol;
 5
           3-Nitro-5-(2-(6-(2-phenylethylamino)hexylamino)
      ethyl]-1,2-benzenediol;
           3-Ethyl-4-[2-[6-[2-phenylethylamino]hexylamino]
      -ethyl]-1,2-benzenediol;
           3-Butyl-4-[2-[6-[2-phenylethylamino]hexylamino]-
10
      ethyl]-1,2-benzenediol;
           6-[2-[6-[2-Phenylethylamino]hexylamino]ethyl]
     -[1,1'-biphenyl]-2,3-diol;
           4-[2-[6-[2-Phenylethylamino]hexylamino]ethyl]-
     1,2,3-benzenetriol;
          4-[2-[6-[2-Phenylethylamino]hexylamino]ethyl]-
15
     -3-phenylmethyl-1,2-benzenediol;
          3-Fluoro-4-[2-[6-[2-phenylethylamino]hexylamino]-
     ethyl]-1,2-benzenediol;
          5-Fluoro-4-[2-[6-[2-phenylethylamino]hexylamino]
20
     -ethyl]-1,2-benzenediol dihydrobromide; mp 218-220°;
          5-Methyl-4-[2-[6-[2-phenylethylamino]hexylamino]
     ethyl]-1,2-benzenediol;
          3-Fluoro-5-[2-[6-[2-phenylethylamino]hexylamino]
    ethyl]-1,2-benzenediol;
25
         3-Methyl-5-[2-[6-2-phenylethylamino]hexylamino]
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ethyl]-1,2-benzenediol;
          6-Fluoro-4-[2-[6-[2-phenylethylamino]hexylamino]
     ethyl]-3-propyl-1,2-benzenediol;
          3-[1-Methylethyl]-4-[2-[6-[2-phenylethylamino]-
5
     hexylamino]ethyl]-1,2-benzendiol;
          4-[2-[6-[2-Phenylethylamino]hexylamino]ethyl]-3-
     phenylthio-1,2-benzenediol;
          6-[2-[6-[2-Phenylethylamino]hexylamino]ethyl]-
     [1,1'-biphenyl]-2,3,4'-triol;
10
           3-Chloro-5-[2-[6-[2-phenylethylamino]hexylamino]
     ethyl]-1,2-benzenediol;
           3-Bromo-5-[2-[6-[2-phenylethylamino]hexylamino]
      ethyl]-1,2-benzenediol;
           4-[2-[4-[(2-Phenylethyl)aminomethyl]phenylmethylamino]
15
      ethyl]1,2-benzenediol;
           4-[2-[4-[(2-Phenylethyl)aminomethyl]-trans
      cyclohexylmethylamino]ethyl]-1,2-benzenediol;
           4-[2-[2-[2-[2-(2-Phenylethyl)aminoethyl]phenyl]-
      ethyl]amino-ethyl]-1,2-benzenediol;
20
           4-[2-[3-[2-[2-(2-Phenylethylaminomethyl)phenyl]propyl
      amino]ethyl]-1,2-benzenediol;
           E-4-[2-[6-(2-Phenylethylamino)-hex-3-enylamino]ethyl]
      -1,2-benzenediol;
           4-[2-(9-Phenylnonylamino)ethyl]-1,2-benzenediol;
25
           4-[2-[6-(2-Phenylethylthio)hexylamino)ethyl]-1,2
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benzenediol;
          4-[2-[6-[2-Phenylethoxy]hexylamino]ethyl-1,2-
     benzenediol;
          N-6-[2-(3,4-Dihydroxyphenyl)ethylamino]hexyl-N'-
 5
     phenylurea;
          N-[6-[2-(3,4-Dihydroxyphenyl)ethylamino]hexyl]benzene
     acetamide;
          4-[2-[6-(2,3-Dihydro-IH-inden-2-ylamino)hexylamino]
     ethyl]-1,2-benzenediol;
10
          4-[2-[6-(2-Methyl-2-phenylpropylamino)hexylamino]-
     ethyl]-1,2-benzenediol;
          4-[2-[6-(1,1-dimethyl-2-phenyl ethylamino)hexylamino]
     ethyl]-1,2-benzenediol;
          4-[2-(6-[2-(Phenylamino)ethylamino]hexylamino]ethyl]-
15
     1,2-benzenediol;
          4-[2-[6-(2-Phenyloxyethylamino)hexylamino]ethyl]-1,2-
     benzenediol;
          4-[2-[6-[2-(Phenylthio)ethylamino]hexylamino]ethyl-1,2-
     benzenediol;
20
          6-[2-(3,4-Dihydroxyphenyl)ethylamino]-N-(2-
     phenylethyl) hexanamide;
          2-Phenylethyl 6-[2-(3,4-dihydroxyphenyl)ethylamino]-
     hexanoate;
          2-Methylsulphonylmethyl-5-[2-(6-(2-phenylethylamino)
25
     hexylamino) ethyl] phenol;
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2-Amino-4-[2-[6-(2-phenylethylamino)hexylamino]ethyl]-
phenol;
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2- (Methylamino) -4-[2-[6-(2-phenylethylamino) hexyl amino] ethyl] phenol;

5 4-[2-[6-(2-Phenylethylamino)hexylamino]ethyl]-2-(phenylmethylamino)phenol;

N-[2-Hydroxy-5-[2-[6-(2-phenylethylamino)hexylamino]-ethyl]phenyl]acetamide;

2-Fluoro-4-[2-[6-(2-phenylethylamino)hexylamino]ethyl]

10 phenol;

1,2-Dihydro-8-hydroxy-5-[2-[6-(2-phenylethylamino) hexylamino]ethyl]-2-oxo-2H-quinoline, or a pharmaceutically acceptable salt thereof.

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